

INTERNATIONAL SEARCH REPORT

national application No.
CA2004/002052

A. CLASSIFICATION OF SUBJECT MATTER

IPC: B63H 16/20, B63H 23/02, B63H 16/08, B63B 35/73

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC: B63H 16/20, B63H 23/02, B63H 16/08, B63H 35/73

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
Canadian Patent Database, Delpion, USPTO, European Patent Database

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
A	CA 2,308,263 A1 (WILLIAM HALL) 5 November 2001 (05-11-2001)	1-21
A	US 4,943,251 A (LERACH ET AL.) 24 July 1990 (24-07-1990)	1-21
A	US 6,165,030 A (ROBERT M. LEWIS) 26 December 2000 (24-12-2000)	1-21
A	US 5,374,206 A (GREGORY) 20 December 1994 (20-12-94)	1-21

Further documents are listed in the continuation of Box C.

See patent family annex.

• Special categories of cited documents :	
• "A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
• "E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
• "I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
• "O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
• "P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 14 February 2005 (14-02-2005)	Date of mailing of the international search report 23 March 2005 (23-03-2005)
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476	Authorized officer Rafal Byczko (819) 956-0502

INTERNATIONAL SEARCH REPORT
information on patent family members

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CA2004/002052

Application <u>Patent No.</u>	Publication date <u>(day/month/year)</u>	Family members	Priority date (valid claim) <u>(day/month/year)</u>
CA2308263 A1	05-11-2001	NONE	
US4943251 A	24-07-1990	NONE	
US6165030 A	26-12-2000	NONE	
US5374206 A	20-12-1994	NONE	